



DESLONDE de BOISBLANC Distinguished Postdoctoral Associate

For more than six decades, Idaho National Laboratory scientists and engineers have helped solve some of the nation's most pressing energy, environment and national security challenges. We welcome fresh ideas and new perspectives from promising researchers with backgrounds that support our key mission areas.

INL's Deslonde de Boisblanc Distinguished Postdoctoral Associate Appointment is competitively awarded to early career researchers who embody the spirit of ingenuity of de Boisblanc and who have leadership potential. This appointment is intended to recognize distinguished postdoctoral associates and to provide them with experience, mentoring and training to further develop their capabilities.

Appointees may perform leading-edge research and development focusing on innovative reactor designs for uses as varied as the production of electricity for the grid or for remote areas, the generation of high temperatures for industrial applications or for thermal energy storage, or for maritime or space propulsion. Appointees may also perform leading-edge research and development pertaining to the safety, fuel management or experiment management of INL's research reactor facilities. The position requires in-depth knowledge of computational and experimental reactor physics, core design optimization, nuclear instrumentation and thermal-fluids science, as well as experience with established reactor analysis tools such as, but not limited to, RELAP, MCNP5, HELIOS, SCALE, MOOSE, and Serpent.

The award provides up to two years of research support to the selected candidate with a possible one-year extension.

Deslonde de Boisblanc

In 1949 the U.S. Atomic Energy Commission established the National Reactor Testing Station, which is now known as Idaho National Laboratory. Deslonde de Boisblanc was an important scientist in those early days of the laboratory. He spent 25 years in Idaho Falls, first as the managing director of the National Reactor Testing Station and later at the Atomic Energy Commission.

He is most well-known for designing the familiar serpentine core of the Advanced Test Reactor. In 1959, de Boisblanc came up with an idea to arrange the core into multiple regions with different flux traps, which could operate at different power levels simultaneously. Because of its high-neutron flux and large volume of irradiation space, the ATR lends itself to isotope production as well.

De Boisblanc was a founding fellow of the American Nuclear Society, was listed in "Who's Who of American Scientists," and served as an American representative to the Geneva Conventions on the Peaceful Uses of Atomic Energy.

Distinguished Postdoctoral Program Provisions:

- Opportunity to develop and build independent research while helping advance INL, Department of Energy and national agendas for energy and security.
- Access to lab leadership and career-enhancing opportunities.
- Mentors include top INL researchers and leaders.
- A prestigious and competitively compensated position.

Candidate Requirements

- Attained a doctorate degree in nuclear or mechanical engineering, physics or comparable discipline.
- Completed Ph.D. prior to distinguished postdoctoral appointment and within the previous five years.
- Demonstrated leadership and potential for independent research.
- Demonstrated oral and written scientific communication skills in English.
- Applicants are encouraged to establish one or more research contacts at INL to support their application.

Application Deadline

The application is open from August through November, with reviews and selections performed on an as-received basis.

Application Process

Please submit the following materials:

1. Letter of interest that details long-term professional goals, dates of availability, and development goals that include descriptions of strengths and disciplinary areas for research (two pages maximum, 8.5-by-11-inch paper, single-sided)
2. Current curriculum vitae
3. Unofficial transcripts
4. Bibliography of publications, preprints and significant presentations
5. Abstract of doctoral dissertation
6. Proposed research plan (maximum of two pages, 8.5-by-11-inch paper, single-sided) that includes:
 - Research to be addressed
 - Conjectures or hypotheses to be tested
 - Proposed methods of investigation
 - Guiding relevant theoretical frameworks
 - Research schedule
 - Major equipment needs and other necessary resources
7. Three letters of recommendation (one preferred to be from Ph.D. advisor)
9. One or more research contacts at INL if possible

Applicants must submit all required materials through www.inl.gov/careers.

Applications that do not follow all submission instructions may be deemed ineligible.

Finalists may be asked to provide additional information.

Contact Information:

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